

CLAIMS AMENDMENTS

Claim 9 (currently amended): A method for delivering oligonucleotide-stabilized lactone forms of camptothecin drugs to a host comprising the steps of: providing an oligonucleotide-camptothecin drug complex as a delivery vehicle wherein said camptothecin drug contains at least one lactone ring, and said oligonucleotide is RNA or catalytic RNA capable of associating with said camptothecin drug so that at least some part of the lactone ring is ~~associated with~~ covalently tethered to said oligonucleotide and thereby protected from hydrolysis; and administering the oligonucleotide-camptothecin drug complex to the host.

Claim 10 (currently amended): A method of treating a patient with a chemotherapeutic composition, comprising:

administering an oligonucleotide-camptothecin drug complex which incorporates sufficient amounts of active lactone camptothecin drug to exert therapeutic activity when administered to the body, wherein at least a part of the camptothecin drug lactone ring is ~~associated with~~ covalently tethered to said oligonucleotide and thereby protected from hydrolysis during administration, and wherein the camptothecin drug dissociates from the oligonucleotide within the body and exerts its therapeutic activities.

Claim 11 (previously presented): The method of claim 10, wherein the

camptothecin drug is selected from a group consisting of camptothecin; 10-hydroxycamptothecin; topotecan; 9-aminocamptothecin; 9-nitrocamptothecin; 10-hydroxycamptothecin; 10,11-methylenedioxcamptothecin; 9-nitro-10,11-methylenedioxy-camptothecin; 9-chloro-10,11-methylenedioxcamptothecin; 9-amino-10,11-methylenedioxcamptothecin; 7-ethyl-10-hydroxycamptothecin (SN-38); DX-8951; GG211; 7-trimethylsilylmethylcamptothecin; and mixtures thereof.

Claim 12 (previously presented): The method of claim 10, wherein the oligonucleotide is selected from the group consisting of single-stranded DNA, double-stranded DNA, antisense DNA, RNA, and catalytic RNA.

Claim 13-15 (canceled).

Claim 16 (previously presented): The method of claim 10, wherein said oligonucleotide-camptothecin drug complex is held within macromolecular assemblies of non-viral oligonucleotide vectors having a non-viral gene delivery system including transfection vehicles, naked DNA for injection, gene gun particles, liposomes including cationic liposomes, virosomes, receptor-mediated delivery vehicles, and biodegradable and non-biodegradable polymer matrixes.

Claim 17 (previously presented): The method of claim 10, further including

lipid so as to form a lipid:oligonucleotide-camptothecin drug complex from a surfactant, lipid or mixture thereof, said lipid defining a compartment wherein said oligonucleotide-camptothecin drug complex exists and the camptothecin drug is held and protected from hydrolysis and is thus stabilized.

Claim 18 (currently amended): A chemotherapeutic composition, comprising an oligonucleotide-camptothecin drug complex including a pharmaceutically effective amount of active lactone camptothecin drug whereby at least a part of the camptothecin drug lactone ring is ~~associated with~~ covalently tethered to said oligonucleotide and thereby protected from hydrolysis during administration, and wherein the camptothecin drug dissociates from the oligonucleotide within the body and exerts therapeutic activity.

Claim 19 (previously presented): The chemical composition of claim 18, wherein the camptothecin drug is selected from a group consisting of camptothecin; 10-hydroxycamptothecin; topotecan; 9-aminocamptothecin; 9-nitrocarnptothecin; 10-hydroxycamptothecin; 10,11-methylenedioxcarnptothecin; 9-nitro-10,11-methylenedioxy-carnptothecin; 9-chloro-10,11-methylenedioxcarnptothecin; 9-amino-10,11-methylenedioxcarnptothecin; 7-ethyl-10-hydroxycarnptothecin (SN-38); DX-8951; GG211; 7-trimethylsilylmethylcamptothecin; and mixtures thereof.

Claim 20 (previously presented): The composition of claim 18 wherein the

oligonucleotide is selected from the group consisting of single-stranded DNA, double-stranded DNA, antisense DNA, RNA and catalytic RNA.

Claims 21-23 (canceled).

Claim 24 (previously presented): The composition of claim 18, wherein said oligonucleotide-camptothecin drug complex is held within macromolecular assemblies of non-viral oligonucleotide vectors having a non-viral gene delivery system including transfection vehicles, naked DNA for injection, gene gun particles, liposomes including cationic liposomes, virosomes, receptor-mediated delivery vehicles, and biodegradable and non-biodegradable polymer matrixes.

Claim 25 (previously presented): The composition of claim 18 further including lipid so as to form a lipid:oligonucleotide-camptothecin drug complex from a surfactant, lipid or mixture thereof, said lipid defining a compartment wherein said oligonucleotide-camptothecin drug complex exists and the camptothecin drug is held and protected from hydrolysis and is thus stabilized.